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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/776,533

02/12/2004

Young Sik Kim

0630-1967P

4150

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7590

10/13/2006

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EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT

PAPER NUMBER

2627

DATE MAILED: 10/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/776,533

Applicant(s)

KIM, YOUNG SIK

Examiner

Aristotelis M. Psitos

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The IDS of 8/9/04 has been received and made of record.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

1. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As written claim 13 is a duplicate of claim 2, i.e., since claim 2 includes all the limitations of claim 1 and all these limitations are present in claim 13, the examiner finds no distinction there between. Further clarification is respectfully requires.

As far as the claims recite positive limitations the following rejections are made.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Hatanaka et al
- Hatanaka et al discloses a multi-probe array(s) arrangement for accessing a memory device. This array device has both x and y directional scanning ability.
- Furthermore as noted in col. 3 lines 15+ redundant array arrangement can indeed be provided for the ability of compensating defective array elements.
3. Claims 2,3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 as stated in paragraph 2 above, and further in view of Lee et al.
- The ability of having redundancy decoder circuit is further taught by Lee et al.
- With respect to claim 11, this is considered the composite of claims 2 and 1. Hence it falls for the same reasons.
- It would have been obvious to modify the base system of Hatanaka et al with the above teaching from Lee et al, motivation is as discussed by Lee et al so as to access the appropriate addressed element.
4. Claims 4,5,7,8, 9,10,13,14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 2 above, and further in view of Fukuda et al.

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With respect to the limitations of claims 4, 5 & 9, use of fuse elements in this environment are well known as taught by the Fukuda et al reference – used with redundancy cell arrays.

With respect to claim 7, y redundancy capability including appropriate switching elements for selecting/switching of the “y” (either row or column) is considered present in the above combined references, i.e., in order to select/enable the appropriate redundant array, both “x” and “y” selecting capabilities is required.

With respect to claim 10, the nxm array is considered present in the above combined teachings.

Claim 13 is interpreted as a duplicate of the limitations already present/provided by claim 4, hence this claim is met as well.

Claim 14 is interpreted as a duplicate of the limitations already presented by claim 7, hence this claim is met as well.

With respect to claim 15, such is obviously found, i.e., as many columns as required to drive the appropriate cantilever elements must be provided for.

It would have been obvious to modify the base system as relied upon above with respect to claims 2 and 3 with the additional fuse elements teaching from Fukuda et al, i.e., use of existing redundancy circuit array arrangements in order to achieve the desired selection.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 4 above, and further in view of Kuo.

The ability of having appropriate types of lines, i.e., metal/polysilicon in this environment especially in EPROM memory cell arrangements is well known as taught by the Kuo reference.

It would have been obvious to modify the base system as relied upon above with respect to claim 4 and use the well-known materials for their inherent use/ability –i.e., appropriate “lines” for memory addressing circuitry.

6. Claims 12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 11 & 15 as stated in paragraph 4 above above, and further in view of Official notice.

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The use of nand logic circuitry for their inherently logical functionality in order to permit a selection of appropriate addressing lines is considered well known in the electronic arts and Official notice is taken thereof.

It would have been obvious to modify the base system as relied upon above as stated in paragraph 4 with such additional well known logic circuitry, motivation is to use appropriate logic gates in order to perform the desired selection.

7. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 9 & 15 as stated in paragraph 4 above, and further in view of Official notice.

With respect to claim 17, it parallels the limitations of claim 9 previously rejected and includes an inverter with its appropriate functionality.

The use of inverters in logic arrays for their inherent ability is considered well known in the electronic arts and Official notice is taken thereof.

It would have been obvious to modify the base system as relied upon above in paragraph 4 and modify such to include inverters in the appropriate location so as to perform the desired signal selecting/switching.

Claim 18 defines the functioning of the system of claim 17 and falls when the above combined system operates.

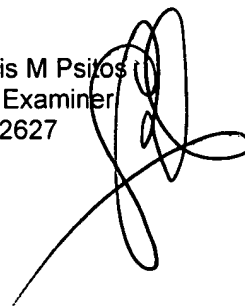
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M. Psitos whose telephone number is (571) 272-7594. The examiner can normally be reached on M-F: 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne D. Bost can be reached on (571) 272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Aristotelis M Psillos
Primary Examiner
Art Unit 2627

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke extending to the left.

AMP